

WHAT IS CLAIMED IS:

1. A liquid crystal device, comprising:
  - a liquid crystal layer sealed between a pair of substrates of a liquid crystal panel including the pair of substrates arranged to face each other;
  - a first polarizer that converts incident light into a circularly polarized component in one rotary direction to emit to the liquid crystal panel, the first polarizer facing an incidence surface of the liquid crystal panel and having a birefringence characteristic that is set based on a peak wavelength of incident light; and
  - a second polarizer that transmits a circularly polarized component in another rotary direction of the light which passed through the liquid crystal panel, the second polarizers facing an exit surface of the liquid crystal panel and having a birefringence characteristic based on a peak wavelength of the incident light.
2. The liquid crystal device according to Claim 1, the birefringence characteristics of the first and second polarizers being set based on the peak wavelengths of red light, green light, or blue light.
3. The liquid crystal device according to Claim 1, the first and second polarizers including linear polarizers and quarter-wavelength retardation plates.
4. The liquid crystal device according to Claim 3, wherein, in each of the first and second polarizers, four times an amount of phase shift of the quarter-wavelength retardation plate is almost equal to the peak wavelength of the incident light.
5. The liquid crystal device according to Claim 1, the first and second polarizers being formed of cholesteric liquid crystal.
6. The liquid crystal device according to Claim 5, the birefringence characteristic of each of the first and second polarizers being set by controlling the cholesteric pitch.
7. The liquid crystal device according to Claim 1, the liquid crystal layer being formed of perpendicularly aligned liquid crystal.
8. A projection-type display device, comprising:
  - light valves of respective axes, each light valve having a same structure as the liquid crystal device according to Claim 1;
  - an input optical system that supplies light-source light having a plurality of axes with different peak wavelengths to the light valves of the respective axes; and
  - an output optical system that projects output light of the light valves of the respective axes.